

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 11, line 32, through page 12, lines 1-4, with the following amended paragraph:

In still other embodiments, the invention pertains to isolated or recombinant polypeptides comprising an amino acid sequence selected from the group consisting of: LNLKEKP(X1)(X2)TPT(X3) (SEQ ID NO:3) and AAHRT(X4)SSR(X5)(X6)VR (SEQ ID NO:4), wherein X1 is N or K, X2 is V or E, X3 is A or V, X4 is L or S, X5 is A or V, and X6 is A or V. In yet other embodiments, the novel HCV polypeptides consist of an amino acid sequence selected from the group consisting of LNLKEKPNVTPTAC (SEQ ID NO:5) and AAHRTSSSRVAVVRC (SEQ ID NO:6).

Please replace the paragraph beginning at page 20, lines 2-16, with the following amended paragraph:

In yet another aspect, the invention pertains to an antibody which binds to a novel HCV polypeptide. A novel HCV polypeptide, or fragment thereof, can be used as an immunogen to generate antibodies that bind such a polypeptide using standard techniques for polyclonal and monoclonal antibody preparation. The invention provides numerous antigenic peptide fragments of novel HCV polypeptides for use as immunogens. Preferably, an antigenic peptide of such a polypeptide comprises at least 8 amino acid residues of the amino acid sequence shown in SEQ ID NO: 2 or the ARF #1 polypeptide or ARF #2 polypeptide consensus sequences. Preferably, the antigenic peptide comprises at least 10 amino acid residues, more preferably at least 14 amino acid residues, even more preferably at least 18 amino acid residues. Preferred polypeptides comprise the ARF #1 consensus sequence :LNLKEKP(X1)(X2)TPT(X3) (SEQ ID NO:3) or the ARF#2 consensus sequence AAHRT(X4)SSR(X5)(X6)VR (SEQ ID NO:4), wherein X1 is N or K, X2 is V or E, X3 is A or V, X4 is L or S, X5 is A or V, and X6 is A or V polypeptide sequences. Other preferred HCV polypeptides comprise or consist of the sequence LNLKEKPNVTPTAC (SEQ ID NO:5) or AAHRTSSSRVAVVRC (SEQ ID NO:6).

Please replace Table 1, beginning at page 43, through page 45, with the following amended Table 1:

TABLE 1. Novel HCV Polypeptides

A Q I L N L K E K P N V T P T A A H R T L S S R V A V R S L A E F T C C R A G A P D W V C A R L										Majority (SEQ ID NO:9)	GenBank Accession Number
A R I L N L K E K P N V T P T V A H R T S S S R V A V R S L V E F T C C R A G A L D W V C A R R	A H F L N L K E K P K E T P S V A H R T S S S R V A D R S L V E Y T C C R A G A H D W V C A R R	A Q I L N L K E K P K E T Q T A A H R T L S S R V A V R S L A E F T C C R A G A P G W V C A R Q	A R I L N L K E K P N V T P T A A H R T L S S R V A A R S L A E F T C C R A G A P E W V C A R R	A Q I L N L K E K P K E T P T V A H K T L S F R A A A R S L A E Y T C C R A G A P G W V C A R Q	A Q I Q N P K D K P K E T P T V A H R T S S S R V A V R S W V E Y T C C R A G A L D W V C A R L	A R I L N L K E K P N V T P T A A Q W T L S S R V A R S L A E F T C C R A G A P D W V C A R L	A Q I L N L K E K P N V T P T A A H R T S S S R V A V R S L V E F T C C R A G A P G W V C A R L			AF011751 (SEQ ID NO:10)	
										D17763 (SEQ ID NO:11)	
										D10988 (SEQ ID NO:12)	
										D14853 (SEQ ID NO:13)	
										D00944 (SEQ ID NO:14)	
										D63822 (SEQ ID NO:15)	
										Y11604 (SEQ ID NO:16)	
										D50482 (SEQ ID NO:17)	
G R L P S G R S L V E G A S L S P R I A G P R A G P G L S P G T L G P S M A M R V A G G Q D G S C P										Majority (SEQ ID NO:9)	
G R L P S G R N L E V D V S L S P R R V G P R A G P G L S P G T L G P S M A M R V A G G R D G S C L	V K L L N G H S L A D D S L S P R R V G A K A G P G L S P G T L G P S M V T R A A G Q G G S C P	G R L L S D P S R V D D A S P S R K I G A P P A S P G E S Q D I L G P C T E T R V A A G R V G S C P	G R L P S G R N L A G G V S L F P R P A D P R E G P G R S P G T L G P S M A T R A V G G R D P S C P	G R L R S G P S H V E G A S P S L R I G A P P L A N P G E N Q D T P G P Y T G M R D S A G Q D R S C P	G R L P N G P S P E A G V S P F Q R L A A R R A V P G V S L G T H G P C M G M R A A G G Q G S C P	G R L R S G R N L V E D A N L S P R R V D P R E G P G H N Q D I H G L F T V M R V V G G Q D G S C P	G R L P S G R N L V E G D N L S P R F A G P R A G P G L S P G T L G P S M A M R V W G G Q D G S C H			AF011751 (SEQ ID NO:10)	
										D17763 (SEQ ID NO:11)	
										D10988 (SEQ ID NO:12)	
										D14853 (SEQ ID NO:13)	
										D00944 (SEQ ID NO:14)	
										D63822 (SEQ ID NO:15)	
										Y11604 (SEQ ID NO:16)	
										D50482 (SEQ ID NO:17)	

P A A L G L L G A P M T P G G G P A I W V R S S I P L R A A S P T S W G T S R S S A P L - G A S P E	Majority	(SEQ ID NO:9)
P V A L G L A G A P Q T P G V G R A I W V R S S I P L R A A S P T S W G T Y R S S A P L L E A A P G	AF011751	(SEQ ID NO:10)
H A A P V H P G A Q M T P G G G P A I W V K S S I P . R A A D S P T S W G T S R G G A L L . E A S Q E	D17763	(SEQ ID NO:11)
P A G L V L L G A P P T P G I D H A I W A E S S I P L R V L P T S W G T S L S L A P R L E A S P E	D10988	(SEQ ID NO:12)
P A A L G L V G A L L T P G G G H A I W V R S S I P S R V A S P T S W G T S T S S A L L . G A L P E	D14853	(SEQ ID NO:13)
P E V P V P L G A P M T P G I G P A T W V R S S I P . R A A L P T S W G T S L S . A P R S A A S P E	D00944	(SEQ ID NO:14)
P A A L A Q R G A Q T T P G V G L A T W V R S S I P L L A A S P T W G T S P S . A A P . G A S Q O Q	D63822	(SEQ ID NO:15)
P V A L D R L G A Q M I P A G G P A I W V R S S I P . P A A S P T S W D T S R S . A P P W V A S P G	Y11604	(SEQ ID NO:16)
P G A L G L V G A P R T P G V G R V I W V R S S I P L H A G S P T S W G T F P S . A A P . G A L P G	D50482	(SEQ ID NO:17)

L W R M A 5 G S W R T G - I T Q Q G I F P V A L F L S S F W L F C P A - L S Q L R P S K C A T L V G	Majority	(SEQ ID NO:9)
P W R M A S G F W K T A . T M Q Q G T F L V A L S L S S F W P C S L A . L C P L Q P T K C A I P R G	AF011751	(SEQ ID NO:10)
P S R M A . G P L K T G . I S Q Q G T C P V A P F L S S F L L C S L A . F I Q Q P V . S G G I R L A	D17763	(SEQ ID NO:11)
L W H T V L G S W R T G . I T Q Q G I Y P V A L F L S F C L L F C H A S Q C Q C L Q W K S G T L V L	D10988	(SEQ ID NO:12)
L W H M V L E S W K T A . I T Q Q G T S P V A L F L S S C S L F Y P A . Q S L L R P S E C A T L R G	D14853	(SEQ ID NO:13)
L S R M A . E S W R T G L I L Q Q G T Y P V A P F L S S C W P C C P A S P P R S P L P K . R T S V P	D00944	(SEQ ID NO:14)
L W R M A S G L L R T G . I M Q Q G I F P V A P F L S S F W H F F R A . L Y Q Q P R Q S I M P I R A A	D63822	(SEQ ID NO:15)
P W H M V S G L W R T G S I M Q Q G I S P V A P F L S S S W H F F R A . L S P L R P L T I A M S Q A	Y11604	(SEQ ID NO:16)
P W R M V S G F W R S A . T T Q Q G I F P V A L S L S S . P C C P V . P F Q L P L M K C A T C P G	D50482	(SEQ ID NO:17)